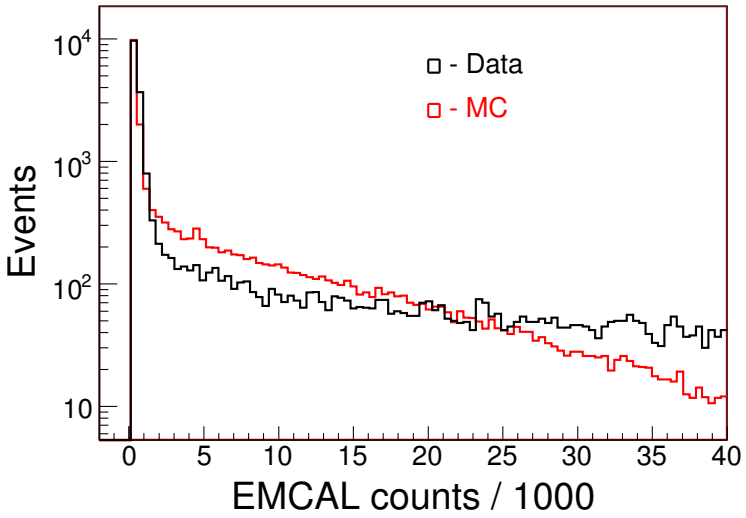
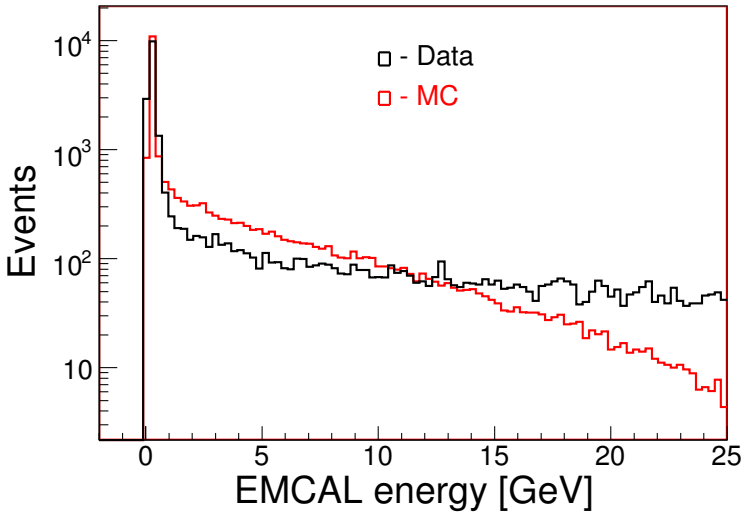
EMCAL response for protons





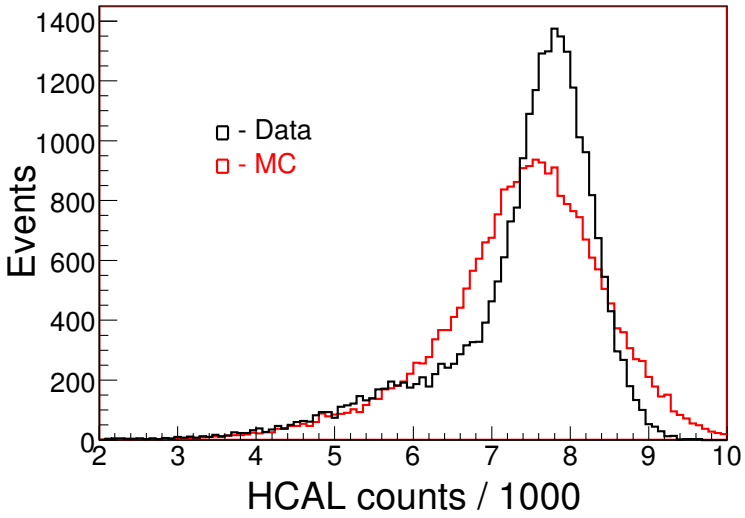
p+C interactions at 120 GeV/c.

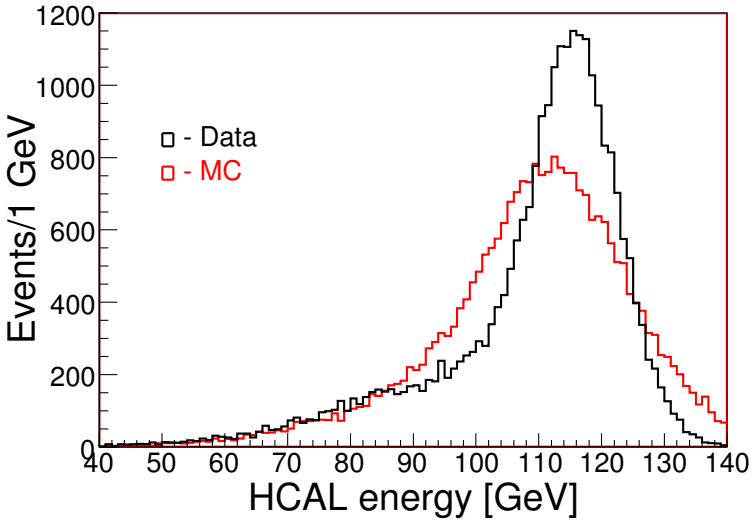
- proton beam triggers (data)
- Z cut: not applied for data, MC - at target
- protons identified by RICH.
- momentum cut: not applied for data, MC - 108$<$ P_{tot} $<$130 GeV/c

Plots are EMCAL responses for the high momentum protons. MC distributions are normalized to same area as data.

- MIP region looks okay, it was off by X2
- Cascade developments are differ, missed e?

HCAL response for protons





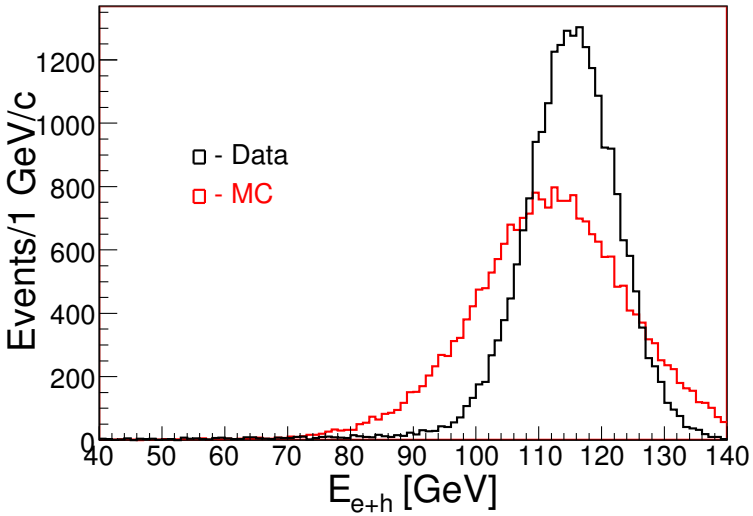
p+C interactions at 120 GeV/c.

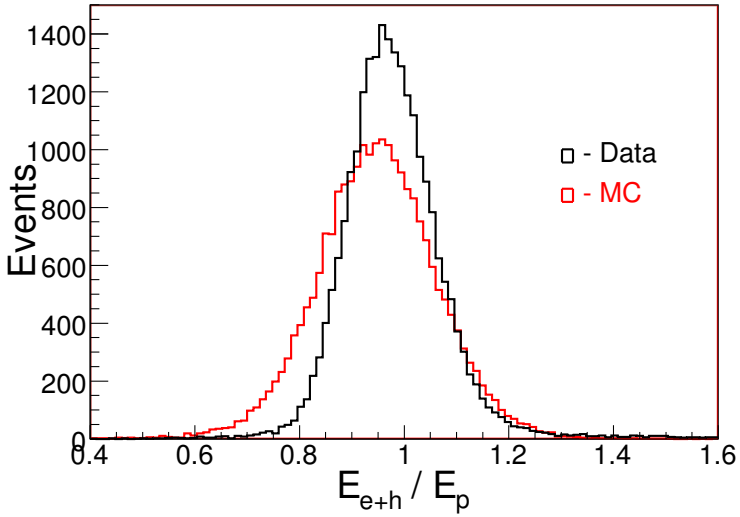
- proton beam triggers (data)
- Z cut: not applied for data, MC - at target
- protons identified by RICH.
- momentum cut: not applied for data, MC - 108$<$ P_{tot} $<$130 GeV/c
- single track within HCAL

Plots are HCAL responses for protons.

- MC peak position was off by 20$\%$, now better
- it expected that MC would be broader than data

E_{e+h} for protons





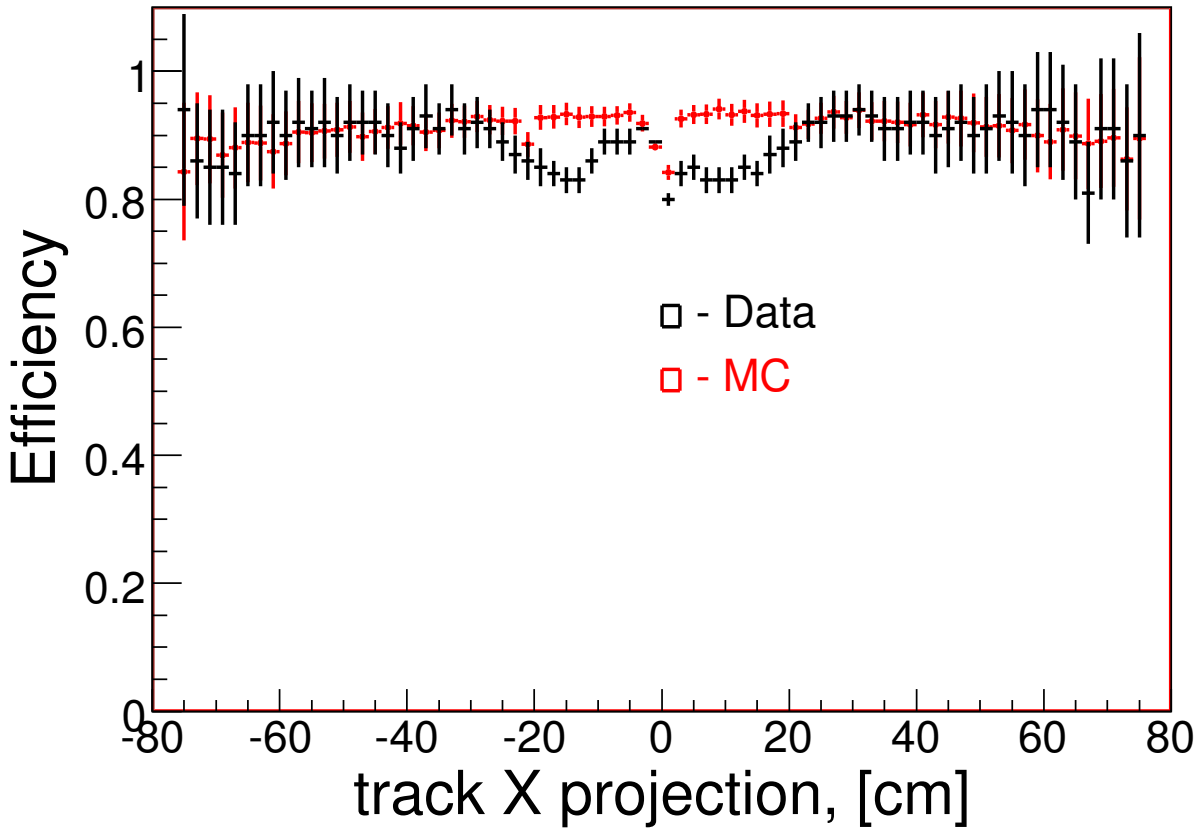
p+C interactions at 120 GeV/c.

- proton beam triggers (data)
- Z cut: not applied for data, MC - at target
- protons identified by RICH.
- momentum cut: not applied for data, MC - 108$<P_{tot}<$130 GeV/c
- single track within HCAL

Upper plot: EMCAL + HCAL energy sum for protons. The low energy tail is reduced.

Bottom plot: E_{e+h} / E_p ratio distribution. Finally, it looks not too bad.

EMCAL - track matching



MC match efficiency was twice below than data. Now it fixed.